



Model Toxics Control Account 1999 Annual Report

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Washington State Department of Ecology's Mission

The mission of the Department of Ecology is to protect, preserve, and enhance Washington's environment and promote the wise management of our air, land, and water for the benefit of current and future generations.

Purpose of this Report

The purpose of this report is to give you an update on how state agencies and programs spent Toxics Control Account funds in Fiscal Year 1999 (July 1, 1998, through June 30, 1999). Specifically, this report will show:

- How much revenue was generated during Fiscal Year 1999 for the Toxics Control Account fund via the Hazardous Substance Tax, cost recovery, fine and penalties, Voluntary Cleanup Program fees, and mixed waste fees;
- Which governmental entities received funds from the Toxics Control Account in Fiscal Year 1999;
- What accomplishments were achieved as a result of receiving these funds.

Cover Photo:

One-hundred five thousand tons of auto shredder fluff were excavated from the Sternoff Metals site in Renton. The material was treated and returned to a portion of the site that will be developed starting in the summer of 2000. Another area of the site contaminated with PCBs was remediated and is occupied by a clothing manufacturing company. The rest of the 43-acre site is currently under development by way of a prospective purchaser consent decree. Photograph taken by Sonia Axter, Wilder Construction.

A Message from the Director



Over the years, money in the Toxics Control Account has fluctuated fairly significantly, and revenue collected from the Hazardous Substance Tax has been a challenge to estimate. Over a 10-year period, tax collections have ranged from

a high of \$50 million to a low of \$34 million. This lack of stability is mainly due to the majority of tax revenue coming from petroleum products, and the market price of crude oil surging up and down in response to market forces. Adding to the uncertainty are several pending lawsuits against the Department of Revenue in which oil companies claim they've paid too much Hazardous Substance Tax and want reimbursements. These lawsuits could result in the loss of millions of dollars to the Toxics Control Account, and ultimately, to the agencies that receive money from the fund.

The Hazardous Substance Tax, established by the Model Toxics Control Act, is the principal funding source for the Toxics Control Account, the topic of this report. The Toxics Control Account pays for important activities within the departments

of Ecology, Health, Agriculture, Revenue, and the Washington State Patrol.

Last year, our Toxics Cleanup Program had to seek a new source of money from the Office of Financial Management to help pay for activities formerly funded through the state portion of the Toxics Control Account. For the Department of Ecology as a whole, financial uncertainties and new environmental challenges strain our capacity to effectively protect, preserve, and enhance our environment. For instance, in the last three years, we've seen the number of drug labs in Washington State double, and the number of contaminated sites reach more than 8,000.

In spite of funding challenges and the ramifications of Initiative 695, we do see a bright future for Fiscal Year 2000. With a strong and bustling economy, we hope to see more private sector involvement in our work.

- We intend to accelerate the pace of cleaning up leaking underground storage tank sites. One strategy will be to further encourage liable parties to enter our Voluntary Cleanup Program to clean up their sites independently of Ecology.
- We will work to see more business involvement in "brownfield" sites (industrial sites that are cleaned up for new development). We already have the means to protect prospective purchasers of brownfield properties from future liability. There are also loans and grants available to prospective purchasers. We will continue to work with citizens to let them know what's available.

■ We will quickly implement our new Model Toxics Control Act rule by actively seeking a common understanding with interested citizens and organizations to develop and implement guidance for cleanup.

■ We will work to address the unique challenges facing sediment cleanups through a focused Sediment Management Program. For example, working towards a multi-user disposal site for contaminated sediments, implementing lessons learned from the Bellingham Bay Pilot Project, and resolving outstanding policy issues.

■ We will work to understand and act on the special challenges of area-wide contamination. Some industrial and agricultural contamination situations will require a shift in focus from effects on local sites, defined in terms of acres, to area-wide effects, defined in terms of square miles.

■ The Toxics Cleanup Program will continue to stay focused on cleanup work while also defending against an on-going lawsuit that challenges the constitutionality of portions of the Model Toxics Control Act.

We have some significant challenges in the year ahead of us. But working together, government, businesses, and the public can and will protect, persevere, and enhance Washington's environment.

Tom Fitzsimmons,
Ecology Director

Cleanup Environmental Indicators

How healthy is Washington's environment. Is the health of our environment getting better, staying the same, or getting worse? To help answer these questions, Ecology developed "cleanup environmental indicators." Cleanup environmental indicators are measures of environmental quality. They allow us to track the condition of the environment at contaminated sites. We can see where environmental progress has been made and where problems exist.

Presently, our cleanup environmental indicators tell us:

- How many acres of land and water have been returned to productive use;
- How much soil, sediment, ground water, and drinking water have been remediated or contained (in terms of cubic feet and gallons);
- How much and what kind of contaminants have been treated, removed, recycled, or contained.

Below are cleanup environmental indicator numbers for calendar year 1998 (cleanup environmental indicator numbers lag one year behind the fiscal year). These numbers reflect values reported by staff and are considered conservative. There are additional cleanups not captured by this system for reporting cleanup environmental indicators.

Soil

In calendar year 1998, 145 acres of land with contaminated soil were returned to productive use. Productive use means the soil contamination no longer exists, or the contamination exists but it's below levels the state considers clean, or a legal restriction has been placed on the property to contain the contamination (such as a land use restriction).

As far as volume (this number represents area plus depth), 3,022,540 cubic feet of soil were cleaned up, and 2,075,228 cubic feet of soil were contained.

Ground Water

In calendar year 1998, 2.3 acres of contaminated ground water were returned to productive use. If we look at gallons, 31,000 gallons of contaminated ground water were remediated and put back into productive use.

Surface Water

1.9 million gallons of surface water were remediated, while nearly 37,000 gallons were contained.

Drinking Water

51.9 million gallons of drinking water were remediated.

Although these numbers may sound like a great deal, take a look at how much water we use on average per day:

- Taking a Bath or Shower: 15-30 Gallons
- Washing the Dishes by Machine/Hand: 14-60 Gallons
- Washing Clothes: 50 Gallons
- Brushing Your Teeth: 1 Gallon

Sediments

Over 269,000 cubic feet of sediments were remediated. If we compare years (see table at right), the total pounds treated, removed, recycled, or contained in 1998 nearly doubled the amount reported in 1997 and was a little less than the weight of the ocean-liner, the Titanic. In particular, the amount of petroleum product removed in 1998 doubled the 1997 figure. This may be due in large part to the December 22, 1998, deadline that required all underground

storage tanks to be upgraded to meet federal standards. In the process of upgrading tank systems, many gas station owners and others with underground tanks encountered petroleum contamination that had to be removed and treated.

Table 1: Amount of Contaminants Treated, Removed, Recycled, or Contained

Base/Neutral Organics (found at chemical manufacturing plants and refineries)	17 lbs.
Halogenated Organics (found at auto repair shops and dry cleaners)	1,537 lbs.
Metals (found at machine shops and foundries)	228,265 lbs.
Polychlorinated biPhenyls (PCBs) (found at old electrical shops)	135 lbs.
Pesticides (found at farms and orchards)	17 lbs.
Petroleum Products (found at refineries, transfer stations, and gas stations)	6,729,964 lbs.
Dioxins (Dioxin is a combustion byproduct of the burning of several materials. It is also found as a byproduct during the manufacture of several chemicals, a byproduct from the chlorine bleaching of pulp and paper, and in the manufacture of other chemicals.)	25 lbs.
Polynuclear aromatic hydrocarbons (PAHs) (found at asphalt plants)	62,934 lbs.
Total pounds	7,022,894

So far, we have not seen consistent year-to-year trends from our cleanup environmental indicators, except to say that overall, we continue to see a significant amount of contamination removed from the environment.

History of the Toxics Control Account

The Model Toxics Control Act became law in 1988 with the passing of Initiative 97. The purpose of the Act was to:

- Clean up contaminated sites;
- Improve management of hazardous wastes;
- Prevent future contamination through pollution prevention.

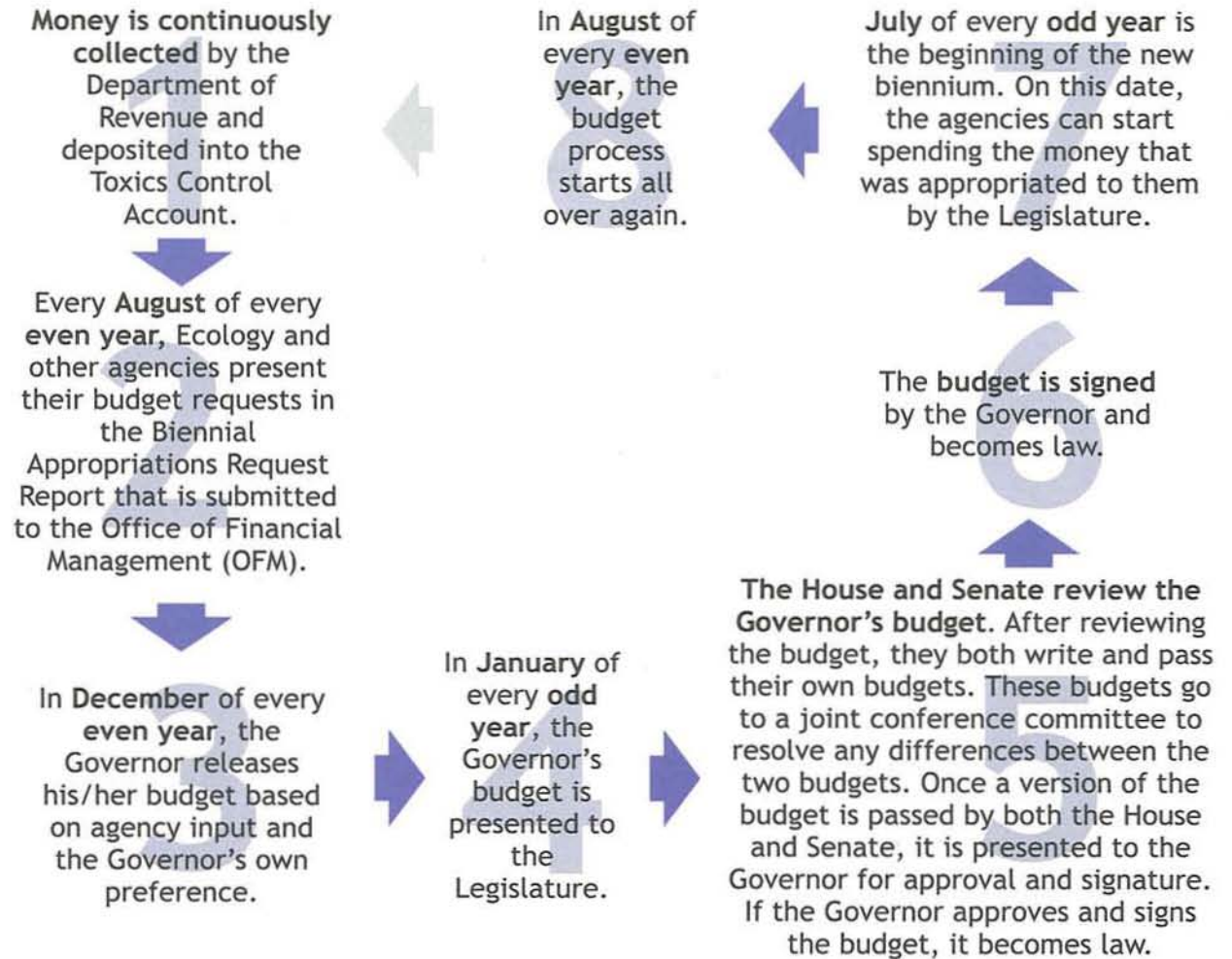
The Toxics Control Account was created under the Model Toxics Control Act. The primary source of money into the account is through a tax on petroleum products, pesticides, and certain chemicals. This tax is known as the "Hazardous Substance Tax."

The Toxics Control Account is divided into two accounts: the State Toxics Control Account and the Local Toxics Control Account. By statute, 47 percent of the tax collected goes into the State Toxics Control Account and 53 percent goes into the Local Toxics Control Account. These percentages do not change. There are other sources of money to the State Toxics Control Account. They are: cost recovery, Voluntary Cleanup Program fees, fines and penalties, mixed waste fees, and miscellaneous.

The Hazardous Substance Tax

As mentioned earlier, the Hazardous Substance Tax is a tax imposed on petroleum products, pesticides, and certain chemicals. The tax is calculated by taking 0.7 percent or \$7 per \$1,000 of the wholesale value of the hazardous substance. It is imposed on the first in-state possessor of the hazardous substance. There are currently 8,000 different hazardous substances subject to the tax. However, over 85 percent of the money collected is based on petroleum products.

Figure 1: How Agencies Receive Appropriations from the Toxics Control Account



Local governments and local citizen groups apply to Ecology's Solid Waste & Financial Assistance Program for grant money from the Local Toxics Control Account. There are specific application periods for the grant programs.

Toxics Control Account Revenue and Expenditures: Fiscal Year 1999

Although Fiscal Year 1999 total state expenditures exceeded total state revenue collected, this was offset by a fund balance in the State Toxics Control Account and also by a two and-a-half million dollar loan from the Local Toxics Control Account. Due to a decrease in the market price of crude oil, there was a shortfall in the State Toxics Control Account. Without the loan from the Local Toxics Control Account, agencies that received State Toxics Control Account funds could not have spent the amount appropriated to them by the Legislature.

State Toxics Control Account

The State Toxics Control Account helps fund activities of state agencies. In Fiscal Year 1999, the departments of Ecology, Health, Agriculture, Revenue, and Washington State Patrol received funds from the State Toxics Control Account.

In addition to Hazardous Substance Tax collections, the State Toxics Control Account receives money through the following sources:

■ **Cost Recovery:** Ecology recovers the costs it incurs (from liable parties) for actions taken at contaminated sites.

■ **Fines & Penalties:** Ecology issues fines and penalties to liable parties that do not comply with the law.

■ **Voluntary Cleanup Program (VCP) Fees:** For a fee, Ecology reviews liable parties' site workplans, sampling plans, cleanup plans, and provides technical assistance.

■ **Mixed Waste Fees:** Ecology collects fees from facilities that manage mixed waste.

Starting on page 5, the report contains a brief narrative by each agency or program that received State Toxics funds in Fiscal year 1999. Details on how the funds were spent is provided.

State Toxics Control Account Revenue

Taxes	\$15,494,000
Mixed Waste Fees	\$4,142,979
Cost Recovery	\$3,259,590
Miscellaneous	\$116,647
Voluntary Cleanup Program Fees	\$356,215
Fines & Penalties	\$53,907
Total	\$23,423,338

Figure 2: State Toxics Control Account Expenditures

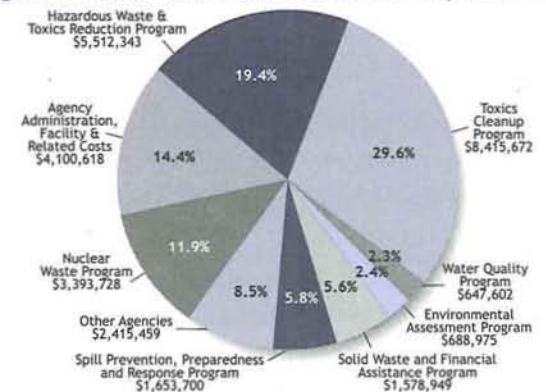


Table 2: Toxics Control Account Revenue and Expenditures: Fiscal Year 1999

Toxics Control Account Revenue	Local Toxics	State Toxics
Hazardous Substance Tax	\$17,472,000	\$15,494,000
Mixed Waste Fees		\$4,142,979
Cost Recovery		\$3,259,590
Miscellaneous		\$116,647
Voluntary Cleanup Program Fees		\$356,215
Fines & Penalties		\$53,907
Total Revenue	\$17,472,000	\$23,423,338
Ecology Expenditures		
Toxics Cleanup Program		\$8,415,672
Hazardous Waste & Toxics Reduction Program	\$359,837	\$5,512,343
Agency Administration, Facility & Related Costs	\$251,187	\$4,100,618
Nuclear Waste Program		\$3,393,728
Solid Waste and Financial Assistance Program	\$22,608,756	\$1,578,949
Spill Prevention, Preparedness and Response Program		\$1,653,700
Environmental Assessment Program		\$688,975
Water Quality Program		\$647,602
Shorelands and Environmental Assistance Program	\$426,800	
Total Ecology Expenditures	\$23,646,580	\$25,991,587
Other Agency Expenditures		
Health		\$1,549,710
Agriculture	\$256,141	\$614,409
State Patrol		\$220,000
Revenue		\$31,340
Total All Agency Expenditures	\$23,902,721	\$28,407,046

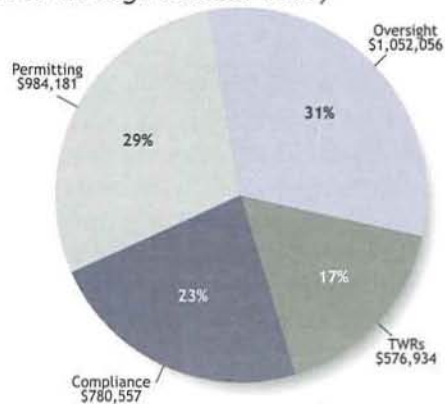
The Department of Ecology: Toxics Cleanup Program

Ecology's Toxics Cleanup Program received the most funds from the State Toxics Control Account in Fiscal Year 1999. The program was also responsible for generating a substantial amount of money for the account. Through cost recovery and its Voluntary Cleanup Program, the Toxics Cleanup Program generated over three million dollars for the State Toxics Control Account.

During Fiscal Year 1999, the Toxics Cleanup Program used State Toxics Control Account funds primarily on:

- Cleaning up high-priority contaminated sites (rank 1,2 or Superfund);
- Cleaning up lower-priority contaminated sites (rank 3, 4 or 5);
- Providing technical assistance to those cleaning up contaminated sites;
- Investigating, and if necessary, ranking new sites;
- Providing program support to staff working on the above activities.

Figure 3: Known & Suspected Contaminated Sites (July 1988 through October 1999)



Total sites: 8,119 (over 400 new sites in FY 1999)
(These numbers includes leaking underground storage tank sites.)

Cleaning up High-Priority Contaminated Sites

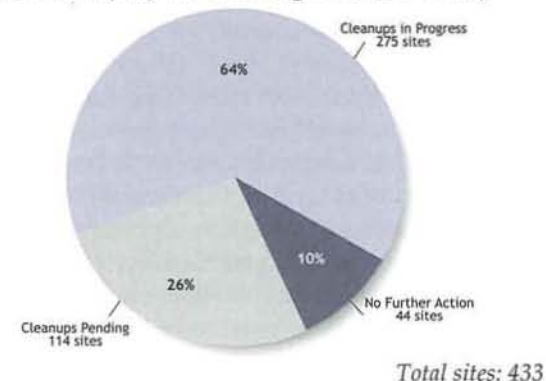
High-priority sites are comprised of Superfund sites and sites Ecology has ranked 1 or 2. Due to greater health and environmental concerns, Ecology primarily works on high-priority sites. All of these sites are on Ecology's Hazardous Sites List.

What makes these sites high-priority? The answer is the *contaminants* – the amount, how toxic they are, and how easily they can come into contact with people and the environment. Public concern and a need for immediate response may also affect which sites get top priority.

There are currently 433 high-priority sites in the state of Washington. The Toxics Cleanup

Program cost recovers about 75 percent of the money it spends on these sites.

Figure 4: Status of Superfund and sites Ecology has ranked 1 or 2 (July 1988 through October 1999)



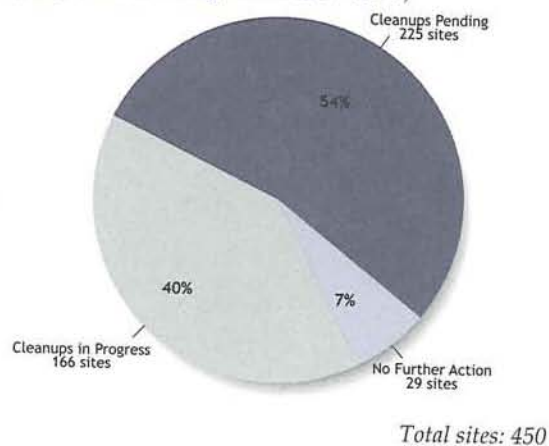
This 1998 photo of the Minitrie Tire Fire site in Rochester was taken 14 years after the fire occurred. A substantial number of some 300,000 tires on-site burned. Today the site has been cleared of residual tires, ash, PAH-contaminated soil, and a majority of zinc-contaminated soil. The remediation is complete, and the site is undergoing final vegetation testing. Photograph taken by Marcel Szyzkowski, P.E., Department of Ecology.

Natural Resource Damage Assessments (NRDA) sites:

A site becomes involved in the NRDA process when its natural resources (such as fish and shellfish) become damaged as a result of site contamination. To date, sites with natural resources damage assessment activities have mainly been in marine areas and are often Superfund sites.

During Fiscal Year 1999, NRDA projects underway included: identifying and adopting an additional restoration project to restore a portion of the Puyallup River, continuing implementation of restoration projects along Commencement Bay, and settling the liability of Tulalip Landfill liable parties by having them provide funds into a trust to be used for restoring injured resources or lost habitat.

Figure 5: Status of sites Ecology has ranked 3, 4, or 5 (July 1988 through October 1999)



Cleaning up Lower-Priority Contaminated Sites

The Toxics Cleanup Program oversees 450 contaminated sites with a state ranking of 3, 4, or 5. One-hundred sixty-six of these sites are in the cleanup process, and another twenty-nine have been cleaned up. Ecology's complete list of ranked sites, the Hazardous Sites List, is available on the Internet at www.wa.gov/ecology/tcp/cleanup.html.



This photo taken at the former Tacoma Boatbuilding facility shows railway ties where spent sandblasting grit was excavated. The grit, which was high in heavy metals (such as copper, lead, and zinc), was removed and back-filled with clean material chosen as good habitat for juvenile salmon. The cleanup was negotiated under a prospective purchaser consent decree. Photograph taken by Dom Reale, P.E., Department of Ecology.

Providing Technical Assistance

The Voluntary Cleanup Program allows the Toxics Cleanup Program to provide assistance to liable parties on sites that have a low environmental priority to the agency, but are a high priority to be cleaned up by the liable party or by a prospective purchaser of the property. The Voluntary Cleanup Program allows staff to advise liable parties or prospective purchasers before, during, and after their cleanup.

The Voluntary Cleanup Program is made up of three components: Ecology consultations, prepayment agreements, and prospective purchaser agreements.

Ecology Consultation

Ecology consultations are best for routine cleanups where a cleanup technology is easily identified, such as a leaking underground storage tank site. One may participate in the program by submitting a cleanup report to Ecology. For a fee, Ecology staff will review the report and provide a site determination, such as "no further action" or "future action pending." Since October 1997, 569 sites have entered the Voluntary Cleanup Program. Two-hundred and forty have received a "no further action" determination, and another 302 are still in the review process.

Prepayment Agreement

A prepayment agreement is an agreement whereby an individual agrees to pay Ecology in advance for its oversight. It can be negotiated in the form of an agreed order or a consent decree. A consent decree protects a party from future liability. Unlike Ecology consultations, prepayment agreements are used on larger, more complex sites.

Prospective Purchaser Agreement

These agreements are settlements entered into by the state and a person or company that wants to purchase and redevelop contaminated property. These properties are often referred to as "brownfields." Brownfields are properties that are abandoned or underused because of environmental contamination from past industrial or commercial practices.

Under a prospective purchaser agreement, the liability for the known contamination is settled before the property is purchased. In return, the prospective purchaser provides resources to clean up the contamination at the site.

Investigating, and if Necessary, Ranking New Sites

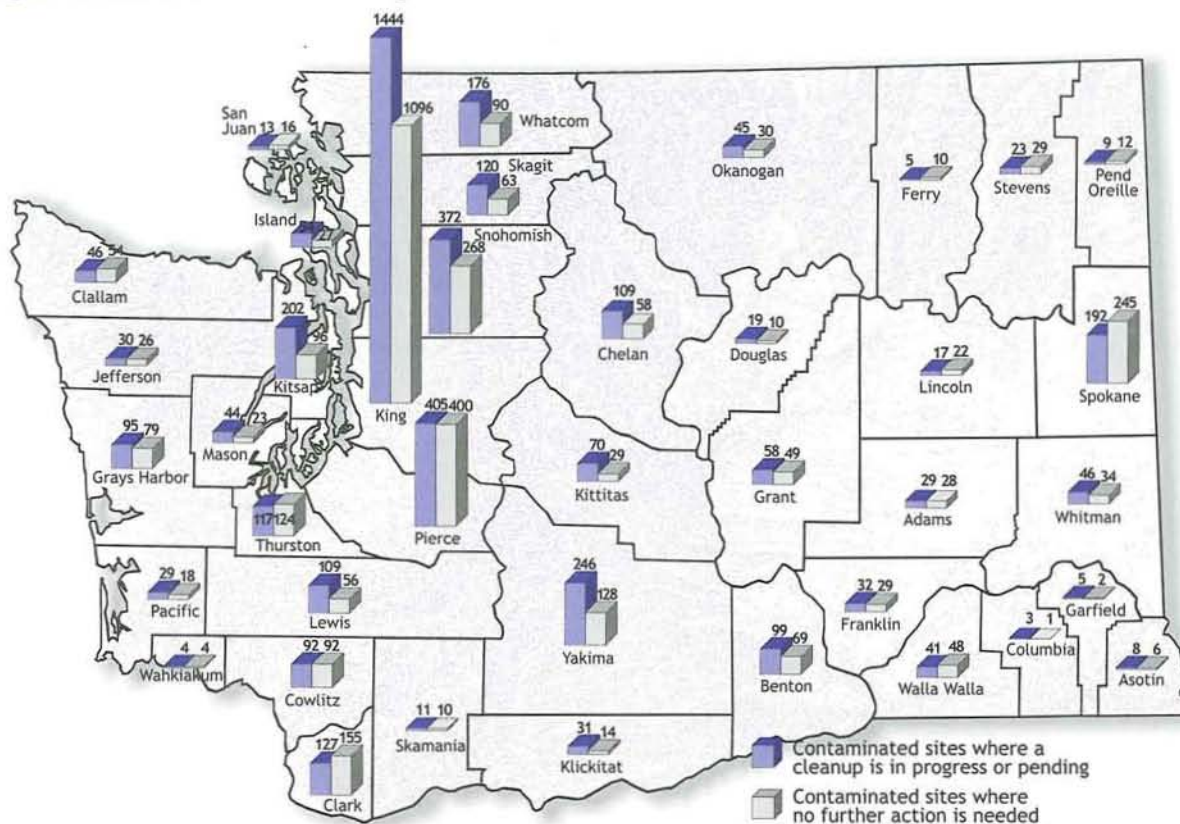
Initial Investigations

The first step in the cleanup process is to investigate the site. Once the Toxics Cleanup Program receives a complaint about a piece of property or the practices of an owner or operator, a program inspector will go to the site and conduct an initial investigation. This involves looking at the present conditions of the site for signs of possible spills and the use and storage of hazardous waste. Some sampling may be involved. During Fiscal Year 1999, Ecology conducted 304 initial investigations.

Site Hazard Assessments

If it is determined that further work is required at a site after the initial investigation, a site hazard assessment may be conducted. A site hazard assessment provides the Toxics Cleanup Program with basic information about a site. The program then uses the Washington Ranking Method to estimate the potential threat the site poses, if not cleaned up, to human health and the environment. A score of one represents the highest level of concern relative to other sites, and a score of five represents the lowest. Hazard ranking helps the Toxics Cleanup Program target where to spend State Toxics funds. During Fiscal Year 1999, 90 site hazard assessments were conducted. Of those, 62 new sites were added to the state's Hazardous Sites List.

Figure 6: Status of sites in Washington State



Program Support

There are many individuals working behind the scenes to get sites cleaned up. Computer staff, budget and planning staff, policy staff, public involvement staff, attorney general staff, and administrative staff all work together to get sites cleaned up. All of these positions are funded in whole or in part by money from the State Toxics Control Account. Some support costs are cost recovered from liable parties.

The Model Toxics Control Act Rule Revision

During Fiscal Year 1999, the Toxics Cleanup Program's Policy staff completed a two-and-a-half year negotiated rule-making effort to revise the cleanup regulation known as the Model Toxics Control Act. While touching nearly every section of the existing rule, the changes mainly fall into three categories:

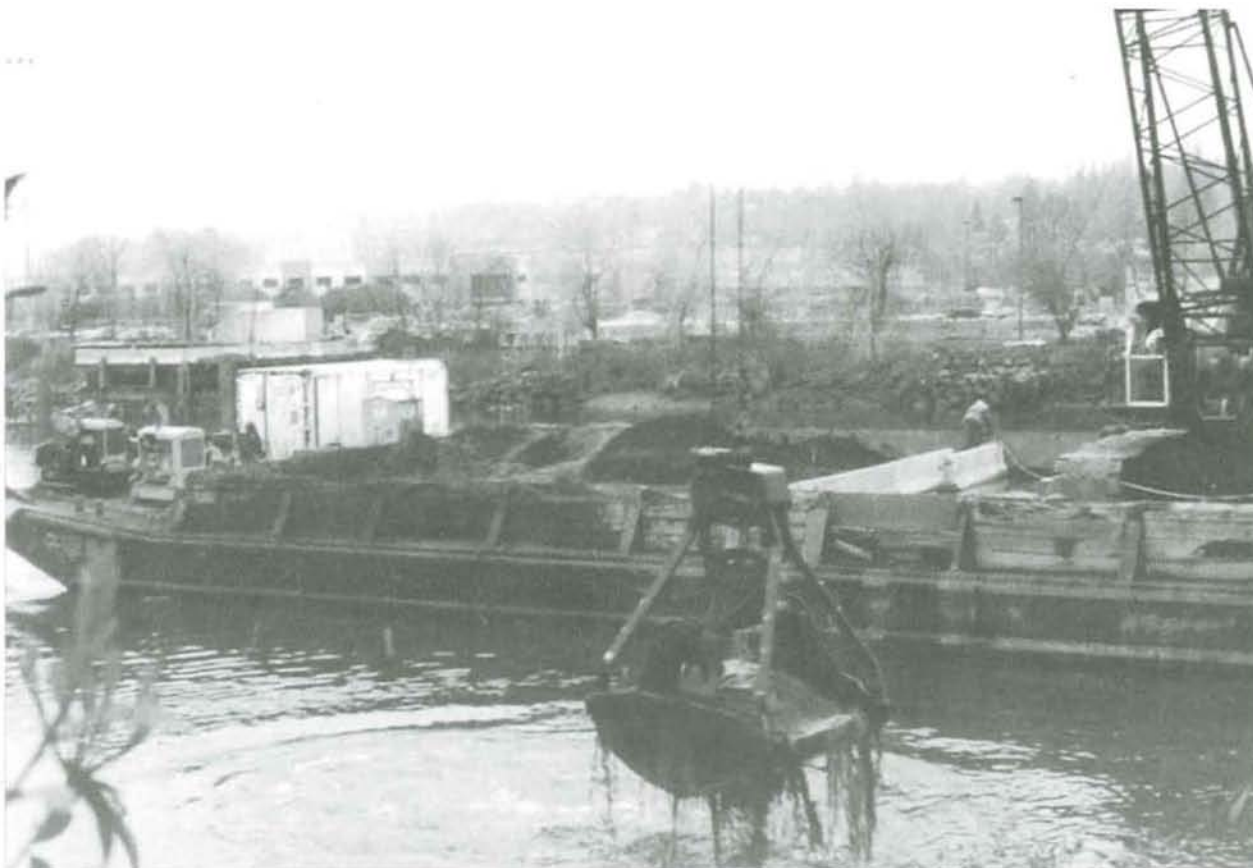
- 1) developing clear and usable regulations;
- 2) including policy and guidance into the rule;
- 3) changing cleanup standards and modifying the methods for site-specific considerations.

Sediment Management Activities

Staff from the Shorelands and Environmental Assistance Program are involved in many activities designed to either prevent or clean up contaminated sediments, including the identification of appropriate places to dispose of dredged material whether contaminated or not. Staff provide technical assistance and oversight to regional Ecology staff on sites with contaminated sediments and assist with the Bellingham Bay demonstration project and the lower Duwamish and Spokane River initiatives.

Staff provide technical assistance and oversight to the cleanup of sites with contaminated sediments. This currently involves implementing guidelines for disposing of relatively clean sediments.

Shorelands and Environmental Assistance Program staff are co-managing a demonstration project in Bellingham Bay to implement a cooperative approach to the cleanup of contaminated sediments. They have also established and maintain a list of contaminated sediment sites in Washington State.



Toxins are dredged out of the Duwamish River. Photograph taken by Martha Turvey, Department of Ecology.

Department of Ecology: Hazardous Waste & Toxics Reduction Program

The Hazardous Waste and Toxics Reduction Program's goal is to prevent hazards due to improper disposal of hazardous wastes into the state's air, land, and waters. Their two primary objectives are to reduce the amount of hazardous waste generated and to safely manage hazardous waste. There are several major activities designed to accomplish these objectives.

Visiting Facilities that Generate Hazardous Waste

The Hazardous Waste and Toxics Reduction Program is concentrating on providing information to business and governmental entities through face-to-face visits with an emphasis on providing technical assistance to help them both reduce and safely manage hazardous waste. Last year, program staff conducted 1,013 visits.

During Fiscal Year 1999, a program team assisted 175 middle and high school science teachers with the storage and management of chemical laboratory products and wastes. The assistance included how to arrange chemicals into compatible storage systems, separating discarded chemicals for safe transportation and disposal, and better management practices in their laboratories. The team found 20 tons of chemicals in need of disposal.

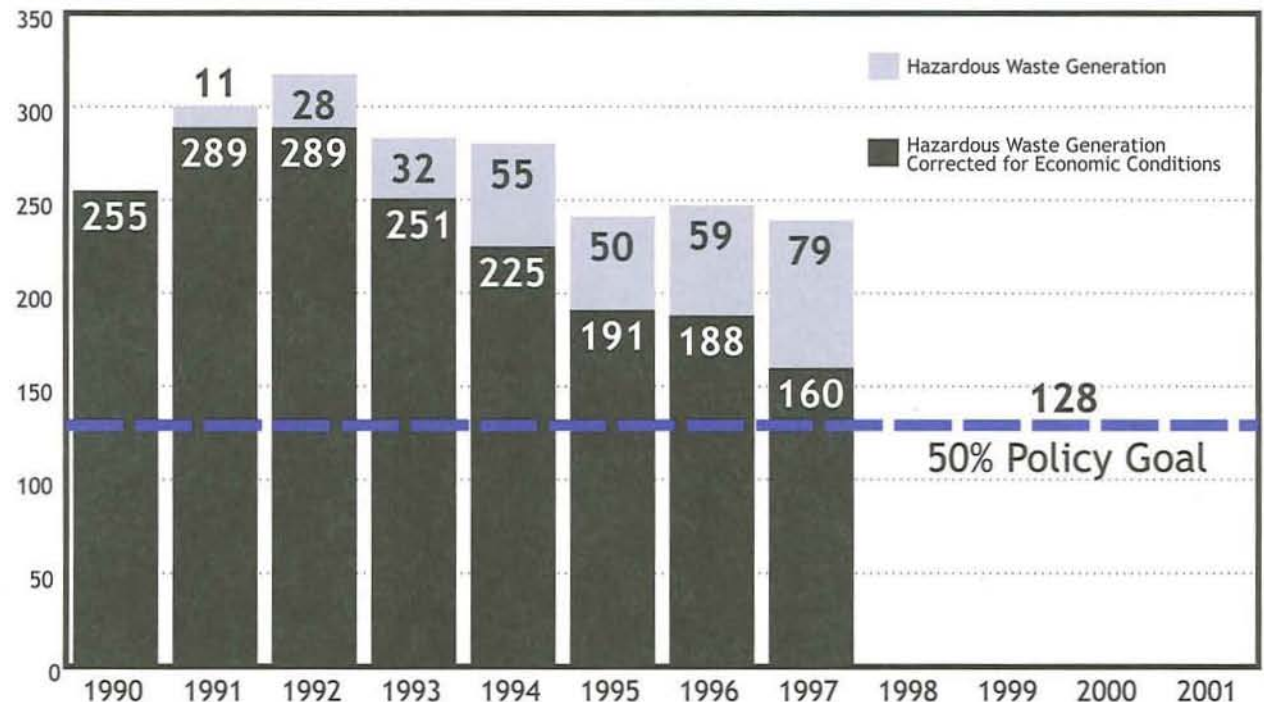
Promoting Pollution Prevention

It's a state law that businesses producing more than 2,640 pounds of hazardous waste annually complete a "pollution prevention plan." The purpose of preparing a plan is to determine if the business can reduce their waste and chemical use. Staff from the Hazardous Waste and Toxics Reduction Program provide technical assistance to businesses preparing plans. Some 697 businesses in Washington currently participate in this program.

Making Common Sense Hazardous Waste Management Decisions

The Hazardous Waste and Toxics Reduction Program is using creative ways to make the Dangerous Waste Regulations workable while still protecting human health and the environment. For example, the program has determined that etchants (sludge resulting from using etchant solution in manufacturing circuit boards) can be safely used as a substitute for a raw material – due to its high copper content. This allows the etchants to be recycled, rather than disposed of as a hazardous waste.

Figure 7: Progress Toward the 50% Hazardous Waste Reduction Goal



Providing Technical Assistance on Hazardous Waste-Derived Fertilizers

During the last fiscal year, staff reviewed fertilizer-related legislation, interpreted existing rules, and provided technical assistance to generators of hazardous waste-derived fertilizers on compliance with existing laws and regulations. Staff also wrote a report titled "Screening Survey for Metals and Dioxins in Fertilizer Products and Soils in Washington State." The report was submitted to the Legislature.

Conducting Enforcement When Necessary

Maintaining a credible enforcement capability is essential to keeping technical assistance effective. In most cases, unless there is an immediate threat to human health and/or the environment, assistance is offered to help a business correct the problem before resorting to an enforcement action. During Fiscal Year 1999, the program issued six hazardous waste enforcement actions totaling \$248,000.

Keeping the Public Informed

The Hazardous Waste and Toxics Reduction Program has several efforts underway to provide information to the public. During Fiscal Year 1999, staff responded to more than 18,167 telephone calls on hazardous waste issues. Staff conducted 62 workshops on safe waste management and pollution prevention – attended by 2,902 people. Staff also prepared a quarterly newsletter "Shoptalk" to provide the public with current tips on reducing and safely managing hazardous waste.

The program also collects a variety of data on hazardous waste generation/management, hazardous substance use and release, and pollution prevention. The public can use this information to monitor hazardous waste in their communities.

Permitting Facilities that Treat, Store, or Dispose of Hazardous Waste

Staff issue permits to facilities that treat, store, or dispose of hazardous waste and that operate in a manner protective of human health and the environment. In Fiscal Year 1999, staff issued four final permits and modified four permits.

Conducting Cleanups at Treatment, Storage, or Disposal Sites

This activity involves cleaning up facilities that have become contaminated with hazardous waste. In Fiscal Year 1999, staff worked with businesses to complete eight site closures. Staff also issued two Toxic Cleanup orders.



An Ecology inspector checks drums for proper labeling and signs of leakage at a Tacoma storage and recycling facility. Photograph taken by Kerry Graber, Department of Ecology.

Department of Ecology: Other Programs

Department of Ecology: Program Administration

State and Local Toxics Control Account funds help pay for program administration. These services provide the foundation from which Ecology is able to address the goals of the Model Toxics Control Act. They are:

- *Executive management* oversees the Department's mission, goals, and policies;
- *Regional directors* represent the director in local communities and provide coordination on complex local issues;
- *Legislative and intergovernmental relation staff* coordinate legislative activities, represent agency policy to other governments, and coordinate rule development;
- *Education and public information staff* provide primary leadership in environmental education, community outreach, public involvement, and media relations;
- *Additional costs* include computer support, telecommunications, budget and central planning, accounting and fiscal services, records management, mail handling, facility planning and maintenance, warehousing, and motor pool services.

Department of Ecology: Nuclear Waste Program

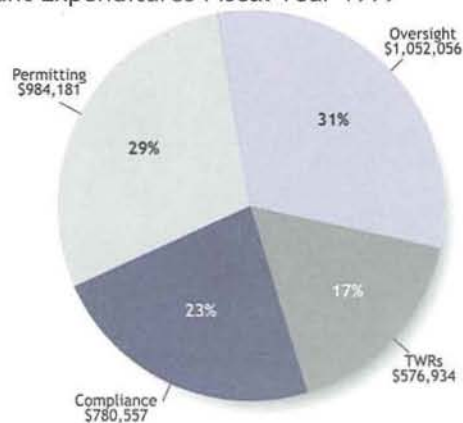
The Nuclear Waste Program regulates the storage, treatment, and disposal of dangerous waste and mixed waste at Hanford and certain non-Hanford facilities. Mixed waste contains both a hazardous and radioactive component.

In Fiscal Year 1999, Toxics Control Account funds helped pay for compliance inspection, regulatory oversight, technical assistance, review and approval of mixed waste permit applications, and providing oversight of the Tank Waste Regulation System (TWRS). The TWRS project addresses environmental risks at the Hanford Tank Farm.

The Nuclear Waste Program collects fees from facilities that manage mixed waste in the state. This money goes to the State Toxics Control Account where it is appropriated to the Nuclear Waste Program.

The following pie chart demonstrates how the Nuclear Waste Program spent its appropriations in Fiscal Year 1999.

Figure 8: Nuclear Waste Program Toxics Control Account Expenditures Fiscal Year 1999



Department of Ecology: Solid Waste & Financial Assistance Program

Ecology's Solid Waste and Financial Assistance Program supports and supplements the work of local governments to properly manage and dispose of solid waste. There are more than 300 permitted solid waste facilities in the state from landfills to recycling businesses.

The authority and responsibility to plan for and permit solid waste activities in Washington rests with the local jurisdictional health departments. The Solid Waste and Financial Assistance Program establishes statewide regulations, addresses statewide issues, approves local plans, reviews local permits, and provides technical assistance to local jurisdictions. This partnership helps to protect the environment and human health, while making the best possible use of resources. In 1999, the program provided the following services:

- Provided professional engineering and hydrogeologic support to local health departments.
- Provided technical assistance for solid waste inspections at the request of local health departments.
- Continued efforts to revise solid waste regulations to make recycling easier in the state. These revisions follow legislative direction.
- Assisted counties in developing solid and moderate risk waste plans and in putting these plans to practice. ("Moderate risk waste" is hazardous waste from households or from businesses that generate small quantities.)

Department of Ecology: Spill Prevention, Preparedness and Response Program

Ecology's Spill Prevention, Preparedness and Response Program responds to oil and hazardous substance spills. This involves ensuring cleanup of "orphan" spills (orphan means the owner is bankrupt, unable to locate, or nonexistent), acting as on-scene coordinator, investigating and providing technical assistance or issuing enforcement actions when appropriate, participating in drills, and working closely with federal spill programs. Emergency cleanup at hazardous waste sites and drug labs are included in this activity. Cost recovery is pursued whenever a responsible party is identified.



Drug Lab Activity

The Spills Program uses Toxics Control Account funds for handling and disposing of hazardous wastes found at drug sites. The number of drug labs and abandoned dumpsites in Washington State has risen consistently and dramatically for several years. Ecology responders statewide have seen labs reach 381 in the first seven months of 1999, compared to 349 for all 12 months of 1998, and 203 in 1997. The Spills Program is working hard to reduce and control the costs associated with drug lab activity. For example, the Program has developed relationships with low-cost disposal partners and pioneered innovative way to depressurize waste cylinders with law enforcement assistance. Fortunately, some



*Toilet water containing sludge from drug preparation.
Photograph taken by Eric Heinitz, Department of Ecology.*

law enforcement agencies are helping by temporarily staging tanks and lab waste in safe storage so a single run can pick up multiple labs. Most recently, the federal Drug Enforcement Administration has made cleanup contractors available for meth labs in Washington State. This has helped stretch coverage for now, but the workload has far outpaced the funding, and a more permanent solution to this dilemma is necessary.

*Drug-related materials were burned and
dumped at area in Thurston County.
Photograph taken by Eric Heinitz,
Department of Ecology.*

Department of Ecology: Environmental Assessment Program

Ecology's Environmental Assessment Program is responsible for monitoring land and water to measure environmental status, trends, and results. One way program staff accomplish this goal is by conducting evaluations to identify sources of toxic substances in priority watersheds. Staff quantify the loading of the pollutants to surface waters and recommend pollutant load reductions necessary to achieve compliance with state water quality standards. Highlights of the year include:

- Completing a study to evaluate the impact of cleanup activities in Commencement Bay. Data shows a 90 percent reduction in metal contamination in the water column as a result of cleanup activities over the last 15 years.
- Developing Total Maximum Daily Load/Waste Load Allocations for metals in the Spokane River. These efforts are designed to bring the river into compliance with water quality standards for cadmium, lead, and zinc.
- Determining the nature and extent of contamination from leaking underground storage tanks.
- Monitoring the long-term effectiveness of ground water cleanup.
- Monitoring changes in sediment contamination in Puget Sound urban bays.
- Analyzing trace metals found in surface water.
- Identifying and tracking pesticide residues found in fish and shellfish tissues and sediments.
- Monitoring metal contamination in rivers (this activity was dropped effective July 1999 due to funding cuts).

Department of Ecology: Water Quality Program

The Water Quality Program received State Toxics Control Account funds to pay for activities that help protect Washington's water from contaminants.

Aquatic Pesticide Program

This program is aimed at reducing the risk to public health and aquatic life from pesticides that are used to manage aquatic weeds, inva-

sive plants, and pests. Water Quality staff develop and interpret rules that pertain to aquatic pesticides and provide technical assistance to pesticide applicators, lake associations, state agencies, and others to ensure the wise use of aquatic pesticides. Staff assist chemical manufacturers and pesticide applicators and their clients with information regarding permit conditions. Staff also provide educational materials on specific pesticides and aquatic pest control methods.



Staff from Ecology, US Army Corps of Engineers, and a commercial pesticide applicator get ready to apply the chemical, Triclopyr, to the Pend Oreille River. The chemical was used experimentally on milfoil. Photograph taken by Steve Saunders, Department of Ecology.

Lower Columbia River National Estuary Program

The lower Columbia River has been part of the National Estuary Program since 1995. The National Estuary Program was established by Congress in 1987 to identify nationally significant estuaries that are threatened by overuse, development and pollution; and to aid in the development of local management plans to protect and preserve these estuaries. Staff from the Water Quality Program provide assistance to the program's management team involved in the estuary program. The management team consists of representatives from Ecology, the Oregon Department of Environmental Quality, the US Environmental Protection Agency, and citizens.



This photo shows agricultural runoff from Sulphur Creek drainage into the Yakima River. Although the target has not yet been met, large improvements have since been made due to local efforts. Photograph taken by Chris Coffin, Department of Ecology.

Contaminated Sediment Runoff Environmental Initiatives

Water quality in the Yakima River is heavily impacted by irrigation return flows that contain pesticides and other toxic substances. The goal of this project is to provide in-field education and technical assistance to irrigators about the impacts to water quality from improper irrigation practices and to provide assistance to reduce these impacts.

Water Quality Standards for Toxics

Staff provide technical support in developing water quality standards for toxic substances. Water Quality staff have worked on risk assessment issues related to toxics and provided technical assistance to permit writers on using the water quality standards for setting

effluent limits in wastewater discharge permits. Staff chair or co-chair committees addressing the reduction of toxic substances, including the intra-agency committee developing Ecology's strategy on persistent, bioaccumulative, and toxic chemicals of concern and the interagency marine toxics workgroup. The Water Quality Program also helps fund a project with the University of Washington's Economics Departments. Students are researching the economic value of Washington's fish resources. The results of this research will be used in writing Benefit-Cost Analyses and Small Business Economic Impact Statements for several rules.

Department of Ecology: Shorelands and Environmental Assistance Program

The Shorelands and Environmental Assistance Program received State Toxics Control Account funds to help pay for activities that protect Washington's sediments.

As of July 1, 1999, sediment management activities were transferred to Ecology's Toxics Cleanup Program. See *page 8* for more information about sediment management activities.

Permit Assistance Center

At the Permit Assistance Center, staff provide assistance, information, and contacts concerning environmental permitting for business, the public, and other governmental agencies. The center is designed to help users comply with environmental permitting requirements, such as for solid waste and hazardous waste permits. Staff answer permit-related questions from phone or in-person inquiries. In addition, staff work with federal, state, and local permitting agencies to facilitate timely and coordinated project permitting.

Department of Health

The Department of Health (DOH) receives funds from the State Toxics Control Account to perform environmental health protection, monitoring, and assessment activities. These activities are directed towards protecting the public's health from exposure to toxic substances released into the environment. The Department also provides technical consultations and health education assistance to the public; organizations; and federal, state, and local agencies in a variety of program areas. These include illegal drug labs, state and federal hazardous waste sites, indoor air quality, and area-wide contamination issues.

Following is a brief description of a few of the Department of Health's accomplishments during Fiscal Year 1999:

Northern Whatcom County

The pesticide ethylene dibromide (EDB), which had been used to protect crops, contaminated an aquifer in northern Whatcom County. A Public Health Assessment was prepared and a cancer cluster investigation was conducted to address concerns raised by the public regarding contaminated ground water issues. An exposure investigation was also conducted which demonstrated that residents in the area could be exposed to 1,2 dichloropropane (1,2-DCP) in the air while showering with contaminated water. The health assessment summarized available health and environmental data, documented risk, determined potential human exposures to the ground water contaminants (1,2-DCP), ethylene dibromide (EDB), and nitrates. The Department also held a meeting to discuss issues and concerns, and also to give recommendations on how to reduce or eliminate exposure.



Remediation at the Everett Smelter site involves removing contaminated soil and sod from residential homes. Photograph taken by Dave South, Department of Ecology.

Everett Smelter

The Department of Health provided technical assistance to Ecology regarding the cleanup options for the Everett Smelter site.

Able Pest Control

The Department conducted an exposure investigation of apartments built on a former pesticide facility. The investigation revealed that pesticides were detected in dust samples in the apartments but not in the blood of the occupants.

Hamilton Road

Health concerns from residents exposed to perchloroethylene (PCE) through their drinking water prompted the Department of Health to investigate and prepare a health consultation. The Department, along with the Department of Ecology, referred the residents to the Environmental and Occupational Medical Clinic at Harborview for evaluation and consultation. The site property owner was directed to switch residents to a water source that was not contaminated and to explore cleanup options for the existing contaminated water supply.

Contaminants in Fish and Shellfish

The Department of Health provided numerous technical assistance and consultations to Ecology, the Puget Sound Water Quality Authority, and local health agencies regarding the public health risks of consuming contaminated fish or shellfish.

Drug Labs

During the fiscal year, the Department of Health licensed 9 contractors, 14 supervisors, and 22 workers to clean up drug laboratories. In addition, the Department presented 21 clandestine drug lab awareness classes to local health jurisdictions, apartment owner associations, the US Drug Enforcement Agency, and hospitals. As a result, 50 sites were decontaminated by contractors and declared fit to reoccupy. During the fiscal year, the Department also amended RCW.44 to provide local health jurisdictions with the discretion to determine when it's appropriate to allow the use of non-certified contractors to cleanup drug lab sites. The result will be a significant reduction in cleanup costs.

Burlington Northern Santa Fe Railroad Skykomish

This is the site of a former railroad maintenance and refueling facility. The ground water is heavily contaminated with volatile and semi-volatile hydrocarbons. The Department prepared a health consultation to address community concerns over possible indoor exposure to vapors from contaminated ground water under dwellings. Results of the consultation were presented to the residents at a public meeting. In addition, a fact sheet was prepared and distributed to the public.

Drinking Water and Public Health Laboratory

The Department continued to develop contaminant risk ratings for public drinking water sources across the state. Following investigations by the Department in North Whatcom County that examined occurrences and health implications of certain pesticides, a statewide effort was initiated to determine the drinking water quality and sanitary-related status of all licensed farm worker camps. This effort has been largely supported by the State Public Health Laboratory (which has also been managing the funding for sample analyses taken at various suspected contaminated sites in the state). The surveying and sampling of farm worker campsites is presently underway and has posed significant challenges for the Department – given its statewide scope. The Department has also responded to the need for drinking water-source sampling (from public and private sources) when hazardous material incidences occur or when suspected contaminated sites are identified.

South Park

At the request of the Community Coalition for Environmental Justice (CCEJ), the Department prepared several health consultations related to sites located in the South Park neighborhood of Seattle. CCEJ, along with community input, identified eight businesses suspected of causing adverse health impacts in the neighborhood. These businesses include surface coating operations, a Superfund site, and a waste oil processing facility. Potential exposures and associated risks are documented in the health consultations, along with strategies and recommendations to reduce or eliminate these exposures, if present.

King County International Airport

The Georgetown community of South Seattle is located next to King County International Airport and many other stationary and mobile sources of toxic air contaminant emissions. These include various industrial operations and transportation corridors. At the request of the community, a health consultation was prepared that reviewed available environmental sampling data, potential emission sources, and health impacts of the toxic air contaminant emissions in the area. The health consultation contains recommendations to further delineate and quantify the relative contribution of toxic air contaminant emission sources in the area using a combination of dispersion modeling and air monitoring.

Klickitat Valley Sawmill

An old abandoned sawmill site is the subject of great controversy and concern for the nearby town of Klickitat. Public health issues such as asbestos exposure, contaminated soil and ground water, and physical hazards have been identified at the site. A health consultation was prepared that documents site conditions and makes recommendations to mitigate urgent health hazards and further delineate environmental contamination and related human exposures.

Fertilizers

The Department has a continued involvement in evaluating possible public health exposures related to recycling of hazardous waste into fertilizers. The Department continues to be involved in the design and interpretation of studies specified in the fertilizer law passed in 1998, including a plant uptake study, a study of metals in agricultural lands, and studies of dioxins in fertilizers in Washington State soils.

Department of Agriculture

Waste Pesticide Identification and Disposal Program

The Washington State Department of Agriculture's Waste Pesticide Identification and Disposal Program has two primary goals. One is to significantly reduce and eventually eliminate the backlog of prohibited and otherwise unusable pesticides stored by users, especially those stored on farms and other similar rural locations. The other is to prevent future accumulations of unusable pesticides through education focused in the areas of product storage and handling, as well as improved planning before purchase.

In the program's 11-years existence, 887,997 pounds (444 tons) of unusable pesticides have been collected and properly disposed of from 3,252 participants. Eleven regional and five special collections were held during the last fiscal year with 138,490 pounds collected from 445 participants at a total contractor cost of \$224,929.81.

The unusable pesticides are collected at two types of events: regional and special site. The majority of pesticides are collected at regional events. These events are held on a rotating basis around the state and are similar to household hazardous waste collections in that the participant transports their unusable pesticides to a collection site where a hazardous waste contractor packages them into hazardous waste disposal containers. Since the pesticides brought to these sites are fully regulated, the Department prepares and mails a specific bill-of-lading to each of the participants – based upon an inventory they submit before the event. This document must be in the participant's vehicle while on a public road and available to emergency personnel in case of a spill or accident. The

Table 3: Waste Pesticide Disposal Projects Performed by WSDA Fiscal Year 1999 (7/1/98-6/30/99)

Collection Event	When	Participants	Pounds	Disposal Cost	Per pound
Raymond Regional	8/21/98	12	4,134	\$10,241.70	\$2.48
Sequim Regional	9/11/98	9	734	\$2,388.44	\$3.25
Prosser Regional	09/24- & 25/98	52	21,375	\$30,046.56	\$1.41
Orondo Regional	10/14/98	51	8,477	\$16,971.35	\$2.00
Othello Regional	3/17/99	75	22,431	\$33,542.50	\$1.50
Pullman Regional	3/30/99	22	7,563	\$13,467.13	\$1.78
Clarkston Regional	3/31/99	9	1,938	\$3,450.92	\$1.78
Yakima Regional	5/10-11/99	81	25,049	\$39,025.21	\$1.56
Ellensburg Regional	5/12/99	9	3,493	\$5,441.94	\$1.56
Mount Vernon Regional	5/24-25/99	45	15,553	\$23,159.31	\$1.49
Bellevue Regional	5 / 26 / 99	75	22,326	\$33,244.69	\$1.49
Regional total FY 99	11 events				\$1.59
Ellisford 1 Special Site	9/9/98	2	1,182	\$3,848.43	\$3.26
Winthrop 2 Special Site	9/9/98	1	261	\$850.48	\$3.26
Tacoma 1 Special Site (A)	11/16/98	1	2,079	\$3,727.95	\$1.79
Tacoma 1 Special Site (B)	12/11/98	1B (same as A)	320	\$3,168.00	\$9.90
Pacific 2 Special Site	3/15/99	1	1,575	\$2,355.20	\$1.50
Special site total FY 99	5 events				\$2.58
Total FY 99	16 events	445	138,490	\$224,929.81	\$1.62

* Pressurized pesticide cylinders were collected as a part of this project. Special handling and disposal was required. The average amount collected per participant during fiscal year 1999 is approximately 311 pounds. The average amount collected per participant for the entire program (1988 - June 1999) is approximately 291 pounds.

Department also assists the participants with packaging materials to enhance safe transportation and with chemical analysis of unlabeled containers. The remainder of the pesticides are collected at special site events. These events are usually held at the participant's pesticide stor-

age locations. These events are held at the participant's site due to numerous containers of unknown chemicals, hazards associated with transporting due to container condition, and type of pesticides that could pose a risk to other participant's if brought to a regional event.

After the contractor packages the pesticides, they transport them to a permitted disposal facility. Most of the pesticides are disposed of by thermal destruction. Only pesticides containing metallic ingredients that cannot be destroyed by heat (such as arsenic, lead, and mercury) are disposed of at a hazardous waste landfill. Many pesticides, such as DDT, are "land ban" chemicals and are prohibited from disposal at a hazardous waste landfill.

Implementation of the Federal Food Quality Protection Act (FQPA) of 1996 may have a significant impact on the amount of pesticides that become unusable in the next few years. The EPA began to determine risk assessments for the first one-third of the 10,000 food tolerances in the U.S. during August 1999. As a result, several prominent organophosphate insecticides have had use restrictions or prohibitions placed upon them. These first FQPA restrictions will directly affect the tree fruit industry in Washington State. Many tolerances are expected to be revoked or lowered as a result of FQPA. Once a tolerance is revoked, the specific pesticide can no longer be used. This has the potential to create additional containers of unusable pesticides on farms throughout the U.S. and will have an impact on the Waste Pesticide Program. The Program is encouraging pesticide users to limit the amount of pesticides purchased so that they may be used entirely during a specific application or season.

Pesticide Management

The primary goals are to prevent human and animal exposure to pesticides, prevent detrimental effects that may occur from the use of pesticides, and protect the environment. Staff use technical assistance as the fundamental basis for its activities. This approach has proven effective in reducing pesticide misuse and resulting complaints. The State Toxics Control Account funds one Department of Agriculture position in the Moses Lake area. This position carries out compliance and technical assistance activities.

The Pesticide Registration Program is responsible for the annual registration of approximately 8,500 pesticide products, the evaluation and approval/denial of request for special local needs registration, the approval/denial of experimental use permits, and the evaluation and submission of request for federal exemption from the requirement of registration. The State Toxics Control Account funds two positions in this program. The workload of the registration program has increased tremendously during the last two years. The workload could not have been handled in such an effective manner without these two state-funded positions.

Other State Agencies

Washington State Patrol

The Washington State Patrol Fire Bureau uses funds from the State Toxics Control Account to prepare firefighters in Washington State to respond to incidents involving hazardous materials. The Fire Training Academy's mission is to provide the means for public and private firefighters to receive live fire training that meets or exceeds the minimum standards required by federal and state regulations governing firefighter training. Additionally, the Academy provides the technical knowledge and practical training needed by public and private firefighters to recognize and contain hazardous material incidents which threaten our citizens and environment.

The training firefighters receive reduces risk to both the firefighter and the property they protect. Funds received from the State Toxics Control Account are dedicated to instructors, equipment, fuel, and support personnel required to deliver classroom instruction in live fire training in the following areas:

Flammable liquids: *Level 1* provides firefighters with the basic knowledge necessary to identify, control, and recover various flammable liquid emergencies. Instruction includes the behavior of flammable liquids in bulk, fire extinguishing agents, safety, and environmental concerns. Students practice their skills while extinguishing a live, flammable liquid fire on an overturned tanker.

Level 2 provides additional tactical and fire-ground training and experience with problems involving flammable liquids, including handling a team leader position during a flammable liquid casualty. The course provides live fire training using a simulated fuel-loading dock, fuel under pressure (broken flange), and a bulk fuel storage container.

Portable Fire Extinguishers: Students gain experience in fire-ground problems using standard pump-type water extinguishers, stored pressurized water extinguishers, dry chemical extinguishers, and carbon dioxide extinguishers.

Liquid Petroleum Gas (LPG): Firefighters learn the basic properties of LPG, issues surrounding LPG powered vehicle fuel systems and storage tanks and their built-in safety features, leak detection, product identification, and basic tactics for LPG emergencies. Students practice attacking, controlling, and recovering LPG fires on a simulated storage tank, overhead piping, an impinging jet, and an LPG fill station.

*Below: Fire Training Academy students listen for instructions to next drill.
Photo courtesy of Fire Training Academy.*



This combination of academic and hands-on training for first responders enhances emergency preparedness planning, improves response skills, and provides students with the incident command training necessary to mitigate hazardous materials incidents. Additional instruction, such as incident command, using a self-contained breathing apparatus, and search and rescue is also provided. This training is vital to ensure minimal loss of life and property to all citizens throughout the state of Washington.

The Fire Training Academy provided 89,504 hours of practical and classroom instruction during Fiscal Year 1999.

Department of Revenue

The Department of Revenue oversees the collection of the Hazardous Substance Tax.

Local Toxics Control Account

The Local Toxics Control Account is used to fund grants to local governments. The Department of Ecology, specifically the Solid Waste and Financial Assistance Program, administers the grants program.

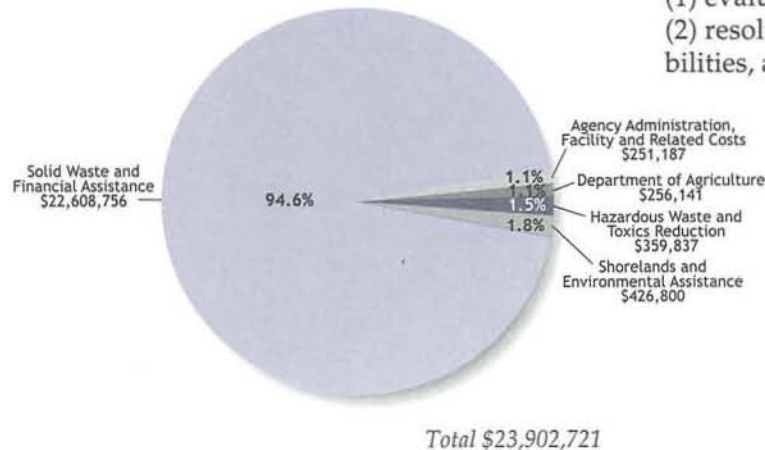
Local governments may use grants for the cleanup of contaminated sites or for programs to manage solid and hazardous waste. Funds from this account can also be used to provide drinking water to local jurisdictions whose wells have been contaminated as the result of a contaminated site.

Local Toxics Control Account Revenue

Although Fiscal Year 1999 total local expenditures exceeded total local revenue collected, this was offset by a large beginning fund balance in the Local Toxics Control Account.

Local Toxics Control Account Revenue
Total \$17,472,000

Figure 9: Local Toxics Control Account Expenditures



Department of Ecology: Shorelands and Environmental Assistance Program

Ecology is working with the Environmental Protection Agency, US Army Corps of Engineers, Department of Natural Resources, Puget Sound Action Team, and the Washington Public Ports Association to design and construct a multi-user disposal facility for contaminated sediments. The lack of readily available disposal options represents a significant barrier to completing sediment cleanup actions, waterfront development projects, and routine navigational dredging actions.

Local Toxics Control Account monies are being used to help fund the technical studies and programmatic environmental impact statement for siting one or more disposal facilities. The draft programmatic environmental impact statement was distributed for public comment in February 1999. The project team reviewed public comments and published a final document in October 1999. The project team is currently developing a scope of work for second phase of the project that will include: (1) evaluation of treatment options, (2) resolution of ownership / operation responsibilities, and (3) site-specific studies.

Department of Ecology: Hazardous Waste & Toxics Reduction Program

In 1998, the Legislature passed the Fertilizer Regulation Act, amending RCW 15.54 (Washington Commercial Fertilizer Act) and RCW 70.95 (Solid Waste Management Act). Ecology staff wrote the fertilizer review criteria and began setting up the soil amendment process during the spring of 1998. Since July 1998, the following work has been undertaken:

- Working with the Department of Agriculture on fertilizer bill implementation, including a fertilizer registration process and a crop uptake study;
- Testing agricultural soils for presence of dioxins (54 sampling sites);
- Providing technical assistance to generators of waste-derived fertilizers on the new testing requirements and application process.

Department of Agriculture

The Department of Agriculture is mandated by Chapter 36, Laws of 1998, the Fertilizer Regulation Act, to conduct a comprehensive study of metal concentrations in plant tissue. The Department entered into an interagency agreement with Washington State University for this study in 1998. For Fiscal Year 1999, \$258,000 was appropriated to the Department from the Local Toxics Control Account. The total spent for the study in Fiscal Year 1999 was \$256,141.

**Department of Ecology:
Solid Waste and Financial
Assistance Program**

Coordinated Prevention Grants

Coordinated Prevention Grants are awarded to local governments to help prevent pollution from improper management and disposal of solid waste and moderate risk waste. The grant program runs on a two-year cycle. Grants from 1998 totaling \$14.9 million will continue through December 31, 1999. During Fiscal Year 1999, an additional \$1,305,640 was awarded, allowing \$2,055,508 in costs to be leveraged by local governments. Local match rates range from 25 to 40 percent of project costs eligible for grant funding depending on the local economic situation.

The program funded the following types of projects:

- Inspecting facilities and pursuing illegal dumpers;
- Permitting facilities and activities;
- Collecting and disposing of household hazardous waste;
- Working with businesses to find ways to reduce and recycle their moderate risk waste;
- Teaching people how to prevent waste and to recycle;
- Providing curbside and drop box collection of recyclables;
- Providing yard waste composting.

An additional \$771,777 was spent on amendments to existing grants.

Recipient	Grant #	Total Project Cost	LTCA Fund Dollars
Asotin Co.	G9900092	\$101,000.	\$60,600
Enumclaw City of	G9800181	\$24,860.	\$14,916
Franklin Co.	G9800264	\$215,126	\$161,345
Franklin Co.	G9900178	\$55,242.	\$41,431
Longview City of	G9900183	\$45,829.	\$27,497
Mason Co DCD	G9900026	\$24,000.	\$18,000
NE Tricounty HD	G9900094	\$71,745.	\$53,809
Oak Harbor City of	G9900040	\$76,033.	\$45,620
Redmond City of	G9800258	\$95,091.	\$57,055
Renton City of	G9800256	\$103,255.	\$61,953
San Juan Co	G9800271	\$15,600.	\$10,140
Skamania County	G9900156	\$96,339.	\$72,254
Tacoma City of.	G9800205	\$668,260	\$400,956
Thurston Co	G9800301	\$353,388	\$212,033
Whitman Co HD.	G9800238	\$43,750	\$28,437
Woodland City of	G9900162	\$65,990	\$39,594
<i>Total</i>		\$2,055,508	\$1,305,640

Breakdown of Coordinated Prevention Grants by Activities:

Hazardous Waste Planning	\$22,190
Household Hazardous Waste Implementation	\$78,450
Household Hazardous Waste Collection and Disposal.	\$118,023
Moderate Risk Waste - Capital	\$69,051
Small Quantity Generator Implementation.	\$3,750
Solid Waste Enforcement	\$82,246
Waste Reduction and Recycling - Activities	\$313,258
Waste Reduction and Recycling - Capital.	\$618,672
<i>Total</i>	\$1,305,640

Remedial Action Grants

The Remedial Action Grants Program provides funding for local governments facing cleaning up contaminated sites. There were five categories of remedial action grants awarded to local governments in 1999.

■ Nine local governments received grants for the study and remediation of typical contaminated sites, including landfills and sites with future public use (total \$4,262,343);

■ Five local governments received Brownfield grants (A Brownfield is an abandoned or underused property that is contaminated from past industrial or commercial practices) (total \$1,773,774);

■ Seventy-three local governments, mostly school districts, received grants for the removal of underground storage tanks and cleanup of related soil or ground water contamination (total \$3,438,982);

■ Ten county health departments received grants to continue or begin investigating contaminated sites and preparing Site Hazard Assessments (total \$1,173,800);

■ One grant was awarded to provide clean drinking water to residents whose water supply was contaminated due to a contaminated site (total \$1,357,875).

An additional \$3,010,596 was spent on amendments to existing grants.

Recipient	Grant #	Total Project Cost	LTCA Fund Dollars
Anacortes City of	G9800311	\$326,048	\$163,024
Asotin Co Fire Dist No. 1	G9900088	\$7,574	\$3,787
Auburn City of	G9900213	\$229,168	\$114,584
Auburn School Dist	G9900113	\$475,506	\$237,753
Bellingham Port of	C9900113	\$1,240,000	\$1,240,000
Bothell Fire and EMS	G9900208	\$5,390	\$2,695
Bremerton City of	G9900212	\$1,000,000	\$500,000
Bremerton Port of	G9900126	\$220,500	\$110,250
Bremerton-Kitsap Co Health Dist	G9900216	\$150,000	\$150,000
Central Valley School District	G9800296	\$58,100	\$29,050
Centralia City of	G9900108	\$42,000	\$31,500
Centralia City of	G9900122	\$642,000	\$481,500
Centralia School Dist	G9900083	\$7,468	\$5,601
Chelan City of	G9900111	\$16,032	\$8,016
Colfax City of	G9900053	\$7,500	\$3,750
Des Moines City of	G9900056	\$112,126	\$56,063
Everett City of	G9900072	\$755,140	\$377,570
Everson City of	G9900193	\$53,200	\$26,600
Gig Harbor City of	G9900191	\$7,484	\$3,742
Gold Bar City of	G9900071	\$29,766	\$14,883
Grant Co PUD	G9900140	\$19,906	\$9,953
Grant Co	G9900039	\$72,500	\$54,375
Grays Harbor Port of	G9900081	\$26,178	\$19,632
Grays Harbor Port of	G9900192	\$109,332	\$81,999
Island Co HD	G9900132	\$87,595	\$87,595
Kelso School District	G9900055	\$34,250	\$17,125
Kent City of	G9900109	\$1,250,000	\$625,000
King Co Transportation	G9900149	\$1,004,216	\$502,108
Kitsap Co	G9900197	\$1,328,000	\$664,000
Kitsap Co	G9900215	\$436,126	\$218,063
Kittitas Co	G9800278	\$2,680,000	\$2,010,000
Kittitas Public Schools	G9900196	\$12,903	\$9,677
Klickitat Co	G9900131	\$27,652	\$20,739
Lacey City of	G9900220	\$48,666	\$24,333
Lewis Co	G9900214	\$33,092	\$24,819
Lynden City of	G9900165	\$100,000	\$50,000
Mason Co Fire Dist No.2	G9900107	\$9,092	\$6,819
Medical Lake City of	G9900112	\$4,222	\$2,111
Napavine School Dist	G9900211	\$25,424	\$19,068
Naselle-Grays River Valley Schools	G9900160	\$24,348	\$18,261
North Beach School Dist	G9900224	\$166,272	\$124,704
North Bend City of	G9900123	\$9,878	\$4,939
North Bonneville City of	G9900073	\$1,692	\$1,269
North Mason School Dist No. 40	G9900082	\$34,416	\$25,812
North Thurston School Dist	G9900152	\$16,452	\$8,226
Oak Harbor City of	G9900117	\$60,836	\$30,418
Orondo School Dist	G9900121	\$3,960	\$1,980
Othello School District	G9800298	\$30,000	\$22,500
Pacific Co	G9900170	\$15,000	\$15,000
Pacific Co	G9900210	\$39,300	\$29,475

Recipient	Grant #	Total Project Cost	LTCA Fund Dollars
Peninsula School Dist	G9900176	\$102,378	\$51,189
Pierce Co Fire Dist No. 5	G9900209	\$28,342	\$14,171
Pierce Co Parks	G9900129	\$41,966	\$20,983
Port Angeles Port of	G9900195	\$47,540	\$35,655
Port Angeles School Dist	G9900168	\$179,818	\$89,909
Port Townsend Port of	G9900151	\$26,956	\$13,478
Puyallup City of	G9900172	\$22,426	\$11,213
Puyallup School Dist	G9900124	\$13,742	\$6,871
Puyallup School Dist	G9900154	\$13,684	\$6,842
Quinalt Lake School Dist	G9900161	\$18,876	\$14,157
Quincy School Dist	G9900164	\$92,080	\$46,040
Rainier School District	G9900100	\$4,900	\$2,450
Redmond City of	G9900091	\$265,862	\$132,931
Redmond City of	G9900198	\$15,556	\$7,778
Renton School Dist	G9900133	\$88,558	\$44,279
Richland City of	G9900138	\$44,510	\$22,255
Riverview School District	G9900199	\$155,716	\$77,858
San Juan County	G9900052	\$18,624	\$9,312
San Juan County	G9900118	\$17,036	\$8,518
San Juan County	G9900202	\$21,980	\$10,990
Seattle City of	G9900080	\$2,220,000	\$1,110,000
Sequim School Dist #323	G9900078	\$186,990	\$93,495
Skagit Co	G9900099	\$80,000	\$80,000
Snohomish Co	G9900139	\$40,000	\$200,000
Snoqualmie City of	G9900021	\$20,512	\$10,256
South Bay Fire Dist #8	G9900169	\$7,500	\$3,750
Southwest Washington Health Dist	G9900150	\$80,000	\$80,000
Spokane (City of) Fire Dept	G9900087	\$15,324	\$7,662
Spokane Health Dist	G9900232	\$100,000	\$100,000
Spokane International Airport	G9900153	\$77,576	\$38,788
Sunnyside School Dist	G9900125	\$36,908	\$27,681
Tacoma City of	G9900184	\$119,416	\$59,708
Tacoma Metro Parks	G9900221	\$624,194	\$312,097
Tacoma School Dist	G9900155	\$17,044	\$8,522
Tacoma-Pierce Co HD	G9900115	\$200,000	\$200,000
The Dalles City of	G9900157	\$9,636	\$7,227
Thurston Co Public Health	G9800274	\$283,330	\$283,330
Thurston Co Road & Trans Dept	G9800262	\$168,858	\$84,429
Toledo-Winlock Airport	G9900167	\$8,220	\$6,165
Tumwater School Dist	G9900228	\$90,000	\$45,000
Vera Water & Power	G9900134	\$30,000	\$15,000
Walla Walla City of	G9900054	\$175,924	\$87,962
Walla Walla Co	G9900079	\$56,744	\$28,372
Walla Walla Port of	G9900163	\$25,426	\$12,713
Walla Walla School Dist	G9900130	\$9,000	\$4,500
Wellpinit School Dist	G9900098	\$6,660	\$4,995
Whatcom Co	G9900186	\$77,875	\$77,875
Yakima Health Dist	G9900223	\$100,000	\$100,000
Total		\$19,183,997	\$12,006,774

Public Participation Grants

The Public Participation Grants Program provides citizen groups and not-for-profit organizations with funding for projects that educate and involve the public in waste issues. For Fiscal Year 1999, the public participation grants were funded by both the Local and State Toxics Control Accounts. In 1999, the program provided grants for 22 projects, which helped people:

- Understand and comment on cleanup proposals at eight cleanup sites;
- Prevent pollution and encourage good environmental stewardship;
- Learn about chemical and integrated pest management in and outside the home and school;
- Recognize businesses that prevent and reduce hazardous waste.

Recipient	Grant #	Total Project Cost	LTCA Fund Dollars	STCA Fund Dollars
Brackett's Landing Foundation	G9900103	\$40,000	\$40,000	
Clark Co Haz Waste Citizen Task Force	G9800231	\$29,000		\$29,000
Columbia River United	G9900110	\$32,000	\$32,000	
Green Zone Committee	G9900101	\$30,700	\$30,700	
Hanford Education Action League	G9900102	\$15,000	\$15,000	
Harstine Community Club	G9900188	\$5,900	\$5,900	
Heart of America Northwest	G9900189	\$32,000	\$32,000	
Nisqually Delta Association	G9800267	\$25,000		\$25,000
Northeast Everett Community Org	G9900119	\$60,000	\$60,000	
Northwest Ecobuilding Guild	G9900187	\$25,568	\$25,568	
Olympic Environmental Council	G9800259	\$30,000		\$30,000
Olympic Environmental Council	G9900142	\$35,000	\$35,000	
Puget Soundkeeper Alliance	G9900177	\$32,980	\$32,980	
Quincy Concern	G9900231	\$30,000	\$30,000	
Re Source	G9900222	\$14,695	\$14,695	
Resource Efficient Building Council	G9900141	\$9,900	\$9,900	
Snohomish Citizen/Business Alliance	G9800252	\$26,000		\$26,000
SW Puget Sound Watershed Council	G9900230	\$16,875	\$16,875	
Wa Pest Consultants Association	G9900173	\$16,350	\$16,350	
Wa Physicians for Social Responsibility	G9900143	\$9,700	\$9,700	
Wa Toxics Coalition	G9900225	\$25,000	\$25,000	
Washington Toxics Coalition	G9900041	\$21,800		\$21,800
<i>Total:</i>		\$563,468	\$431,668	\$131,800

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Toxics Cleanup Program

Washington State

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